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FOREWORD

This is the first edition of the Muni Data Guide in its new format. Our goal is to use a convenient booklet to present "background" information about Muni to anyone who is interested in learning more about Muni's organization and service. The Data Guide tries to answer often-asked questions, such as "How many vehicles does Muni have?", as well as to present other information that might be of interest to someone desiring a better understanding of Muni and public transit. It is recommended that persons who are especially interested in Muni's routes and schedules should use this booklet in conjunction with Muni's *Street & Transit Map* and *Timetable Booklet*.

Of course, a publication of this size cannot be as inclusive as we would wish.

Persons seeking further information on Muni, its plans and programs, should obtain a current edition of Muni's Short-Range Transit Plan and Capital Improvement Program, published by the San Francisco Public Utilities Commission's Bureau of Financial Management. This publication is available from the Community Affairs Department (while supplies last!).

We would be especially interested in receiving any comments you might have about this new version of our data guide. Please write to *Data Guide*, Community Affairs Department, San Francisco Municipal Railway, 949 Presidio Avenue, Room 238, San Francisco, CA 94115.

Community Affairs Department
San Francisco Municipal Railway
February 1991

INTRODUCTION

Muni up to now

The San Francisco Municipal Railway (Muni) began operation in 1912 as one of the first publicly owned transit systems in the U.S., and the first to gain nation-wide attention as a public-service alternative to the private ownership that then predominated in the transit industry. The city charter of 1900 had called for public ownership of utilities, and in 1909, \$2 million in bond issues were approved by the voters, providing funds for the city to start its own streetcar line on Geary St., which began service on December 28, 1912.

In that era, streetcar service was essential for public transportation and the opening up of underpopulated urban areas. The main reasons for the city's beginning its own service were a desire for the city to take a more active role in its own development and the public's strong dislike of the United Railroads of San Francisco, the company that then operated most of the city's transit service.

In the following years, Muni started direct competition with privately owned services and began operations into underpopulated areas that had been poorly served by private companies (after 1912, the private companies did not expand into new areas). Although Muni started at a time when transit service could still be profitable, any excess revenues were immediately plowed back into service improvements.

In April 1921, the United Railroads was re-organized into the Market Street Railway (MSRy) because of financial difficulties, with the new company subsequently developing much improved public relations. Muni and the MSRy remained compettors throughout the '20s and '30s, although the MSRy was always a much larger organization. However, the beginning of the automobile era in the '20s, the Great Depression of the '30s, and Muni's nickel-fare competition finally took their toll on the MSRy, and it became evident (the MSRy's days of profitability during World War II notwithstanding) that the company was merely biding its time until it could be sold to the city.

In September 1944, the MSRy was merged with Muni, after voters had approved the MSRy's purchase for \$7.5 million. The MSRy had almost twice as many employees as Muni, and some people came to wonder which organization had taken over which

In the late '40s and early '50s, most of the combined system's streetcar lines were converted to bus operations, with many of the conversions being to trolley-bus service, powered by the city's Hetch Hetchy hydroelectric system. The consolidation of public transportation in San Francisco was completed with the city's acquisition of the California Street Cable Railroad (CSCRR) in January 1952. In June 1954, voters approved the cutting back of the city's five cable car lines — two acquired from the MSRy and three from the CSCRR — to the present-day three-line system.

The November 1962 voter approval of the \$792 million bond issue for BART, which included improvements for Muni, and the federal government's requirement that Muni should have a comprehensive plan before federal funding would be

forthcoming, were major causes for change at Muni, beginning in the 1970s. Under its annually updated 5-year plan, Muni implemented major service changes between 1979 and 1983, redistributing Muni's service so that the entire city would be well served, and converting a system that was overconcentrated towards downtown into a modified "grid" system, which allows most riders to get from one part of the city to any other with no more than one transfer. Included in the changes were the conversions of three of the diesel lines to trolley-bus service, and rerouting to provide "feeder" service to the higher capacity BART and Muni Metro systems. "Muni Metro" is the name coined for the city's improved streetcar service, in part paid for by the BART bond funds, which began in 1980-82, providing service with new streetcars called light-rail vehicles (LRVs) in the new Market St. subway, in the Twin Peaks and Sunset tunnels, and on the surface in the neighborhoods. Capital costs for Muni Metro through the mid-1980s, including vehicle acquisition and modification, were about \$308 million



Muni's

Streetcar No. 1

in

Trolley

Festival

service.

The early '80s also saw the rehabilitation of the cable car system. It was shut down from September 1982 to June 1984 and reconstructed to make it as safe as possible, while retaining the cable cars' unique cable-and-grip propulsion system. Construction costs for the cable car project were about \$63.5 million, including private donations of about \$10 million. (The cable cars were repaired and refurbished at an additional cost of about \$4 million.)

Muni's Elderly & Handicapped Program showed dramatic improvements in the 1980s, beginning with the opening of the accessible Metro stations for the new streetcars in 1980 and the acquisition of the accessible Flyer and M.A.N. diesels in 1984. (Muni had acquired 25 accessible diesels in 1980, but the lifts proved to be unreliable.) Further Muni improvements in that decade included the extension of service on one trolley-bus line, the implementation of four lanes of transit service on Market Street,

the construction of two new facilities, improvements in maintenance programs, and the phased acquisition of new transit vehicles so that, in the future, all of an aging fleet would not have to be replaced or rehabilitated at the same time.

Muni's Future

The extension of a Muni Metro line is currently under construction, scheduled for completion in early 1991, and further improvements to the Metro system are in the planning stages. Construction has begun for the conversion of a diesel line to trolleybus service, and public meetings are being held on the possibility of converting another diesel line to trolley-bus operations. Further improvements include the acquisition of new diesel buses, trolley buses, and streetcars over the next few years, with new 60' diesels being acquired in 1991. Also, historic PCC streetcars are being acquired so that they can be rehabilitated and replace the 8 Market trolley-bus service. Muni's facilities-improvement program is well under way, and rehabilitation work on one of Muni's major facilities began in late 1990.

A Metro

streetcar

on West

Portal

Avenue.

July 1979.



The passage of the 1/2 ¢ San Francisco sales tax in November 1989 and the passage of the three transit-related state-wide propositions in June 1990 will mean more revenues for Muni construction and acquisition (i.e., capital projects). However, the only kind of operating funds that these funding sources will provide are funds for the increased service that will result from the capital improvements. Operating funds for regular service from federal, state, and local sources have decreased over the last several years, and Muni reduced service in 1988. Thus, there is cause for both concern and optimism as Muni continues its efforts to provide the best possible transit service for San Francisco's residents and visitors — workers, students, shoppers, tourists — anyone who has the need for the services of the San Francisco Municipal Railway.

ORGANIZATION

Muni - One of San Francisco's Public Utilities

Muni, as one of the city's public utilities, is one of the three departments under the jurisdiction of the city's Public Utilities Commission (PUC), whose five members are appointed by the Mayor. The other two departments are the Water Department and the Hetch Hetchy Water and Power System. (The San Francisco International Airport was formerly under the PUC's jurisdiction, but is now under the jurisdiction of the Airports Commission.) The following bureaus and units provide support for the three departments: Financial Management; Utilities Engineering; Personnel and Training; Management Information Systems; Energy Conservation; Safety; Security and Protective Services; Bureau Services; Contract Compliance; and Administration.

The PUC appoints a General Manager of Public Utilities, who delegates the responsibility for the day-to-day operations of the departments and bureaus to their managers. (The General Manager of Public Utilities is usually known as the PUC General Manager, and the departments and bureaus are known as PUC departments and bureaus.)

Muni has a General Manager who reports to the PUC General Manager and is responsible for the overall operations of Muni. Muni has four divisions — Transportation (Operations), Maintenance, Engineering, and Administration — all headed by Deputy General Managers. There is also a Director of Labor Relations and Management Development, responsible for Muni's labor relations with fourteen unions, and management education and training, who reports directly to Muni's General Manager.

Muni's Leaders - 1912-1990

From 1912 to 1932, Muni was under the city's Board of Public Works, and Michael M. O'Shaughnessy, the City Engineer from 1912 to 1932, both oversaw Muni's operations and was one of its chief advocates.

A new city charter took effect in January 1932, with the new Public Utilities Commission taking over control of Muni.

Utilities General Managers

1932-1945	Edward G. Cahill
1945-1956	James H. Turner
1956-1958	T. N. Bland
1959-1964	Robert C. Kirkwood
1964-1970	James K. Carr
1970-1976	John D. Crowley
1977-1979	John B. Wentz
1979-1983	Richard Sklar
1983-1987	Rudolf Nothenberg
1987-1988	Donald Birrer
1988-1989	Dean W. Coffey
1989-present	Thomas J. Flzev

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Muni Superintendents/General Managers

1912-1917	Thomas Cashin
1917-1940	Frederick Boeken
1940-1952	William H. Scott
1952-1960	Charles D. Miller
1960-1968	Vernon W. Anderson
1968-1974	John M. Woods
1974-1982	Curtis E. Green
1982-1985	Harold H. Geissenheimer
1985-1987	William G. Stead
1988-1990	William G. Stead
1990-present	Johnny B. Stein

Muni's Divisions

Transportation Division - determines how many operators are required to provide scheduled service; trains operators and manages all support services required to deliver scheduled service; manages all operators and vehicles in service.

Transportation has two operating departments and three support units:

- Surface Transportation oversees division operations (i.e., matching available operators with available equipment) at the three diesel divisions (Flynn, Kirkland, Woods) and the two trolley-bus divisions (Potrero, Presidio), and the operation of the buses while in service (i.e., after leaving their respective divisions); handles the public's commendations and complaints regarding Muni.
- Rail Transportation oversees operations at the Green light rail (streetcar)
 division, the Metro stations (station agents), and the cable car division, and the
 operation of the rail vehicles while in service.
- Service Planning, Schedules, and Data Services establishes and revises schedules; develops projections for long-term service requirements; proposes and implements route and other service revisions (including vehicle-stop changes); collects and processes data necessary for these activities; oversees Muni's transit shelter program.
- Safety and Training conducts operator training and retraining; identifies hazards in service-vehicle operations and develops programs for their elimination or mitigation.
- Administrative Services handles division personnel and finance needs; provides systems evaluation and development for the division.

Transportation Division statistics (also, see SERVICE section):

1990-91 operating budget	\$134.3 million
Budgeted employees	2,416
Operators	1,833 full time; 220 part time
Inspectors	73
Metro Station Agents	59

The

Hiroshima

streetcar

in Trolley

Festival

service.



Maintenance Division - maintains Muni vehicles (both service and support vehicles) and fixed facilities.

Maintenance is divided into seven departments:

- Diesel Group maintains the diesel buses so that schedule demands can be met.
- Trolley Group maintains the trolley buses.
- LRV Group maintains the light rail vehicles (streetcars) for Muni Metro service.
- Cable Car Group maintains the cable cars and all machinery essential to the operation of the cable car system, including trackway, cable, and cable motors.
- Ways & Structures maintains buildings, yards and grounds, support vehicles, and stationary equipment; maintains Muni Metro stations, track, and wayside.

 Units: special machine shop, track maintenance, non-revenue vehicle shop, plant maintenance, custodial services, and construction services.
- **Power, Signals, & Electronics** maintains the electric power and distribution systems for the streetcars and trolley buses; maintains signalling systems and provides electronic support. Units: motive power, overhead lines, and signals and electronics.
- Administrative Services in charge of the division's personnel, training, materials management, and finance needs, and its systems evaluation and development.

Maintenance Division statistics (also, see SERVICE and FACILITIES sections):

1990-91 operating budget	\$84.3 million
Budgeted employees	1,054

Total labor hours for vehicle inspection and maintenance 1989-90:

Total	1,526,000
Cable cars	160,000
Metro streetcars	556,000
Trolley buses	264,000
Motor buses	546,000



The

Blackpool

"boat" streetcar

in Trolley

Festival

service.

- Electric-power substations nineteen substations with a total rating of 85,750 kilowatts, supplying 43.3 million kilowatt hours of electricity per year for Muni streetcars and and 35.1 million for trolley buses. (One new substation will be added when the J Church extension to San Jose & Geneva Aves. goes into service.) The cable car system's motors receive 4.1 million kwh per year from a separate source.
- Trolley-bus overhead wire 145.0 miles
- Diesel fuel 5.6 million gallons per year.
- Priority bus lanes 8.5 miles (maintained by the Department of Parking and Traffic).
- Non-revenue vehicles 97 automobiles, 82 light trucks, 59 medium trucks,
 41 heavy trucks.

Engineering and Administration Divisions - provide engineering and administrative support to the other Muni divisions.

The Engineering Division has one department:

 Plant Engineering - provides engineering assistance for facility improvements and modifications. Units: design section, construction section, projects program, contract administration, special projects, administrative services.

The **Administration Division** has seven departments:

- Fleet Engineering responsible for the design of Muni's service vehicles.
- Strategic Planning develops plans for Muni's fleets, facilities, and fixed guideways (for streetcars, cable cars, and trolley buses) based on plans for service improvements. Coördinates the implementation of the projects that are approved.
- Community Affairs provides information to the public and the news media; promotes Muni and its services through maps, brochures, posters, and other marketing programs; operates Muni's employee awards programs; oversees the transit vehicle advertising contract.
- Elderly and Handicapped Programs oversees the operation of paratransit services in the city; works with the elderly and handicapped communities in the development and implementation of Muni's accessible fixed-route program.
- **System Safety** identifies potential system safety hazards and develops strategies for their elimination.
- Industrial Safety responsible for management of hazardous materials and compliance with OSHA standards.
- Graffiti Prevention Program coördinates graffiti prevention activities throughout Muni, and between Muni and other agencies.

The Russian streetcar

in Trolley

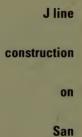
Festival

service.



Engineering and Adminstration Divisions Statistics:

	1990-91 operating budget	\$41.9 million
	Budgeted employees	87
•	Plant Engineering projects	\$12 million
•	Fleet Engineering projects	\$45.7 million
•	Strategic Planning projects	\$1.1 billion
•	Paratransit and accessible projects	\$3.8 million
•	Telephone Information Center calls	50,000 per month
	Vahiala advertising revenue	2 ¢2 / million nor year



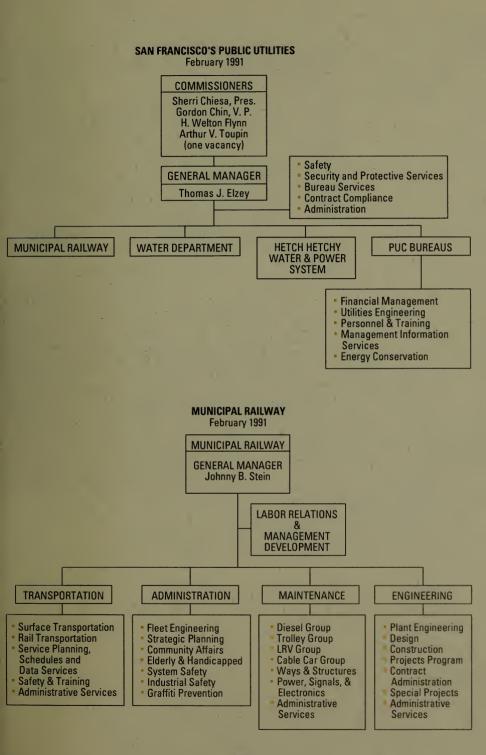
Jose

Avenue.



Elderly & Handicapped Programs statistics:

Lift-equipped buses	431
Accessible diesel lines: 26 lines at all times of their open	ation.
Metro accessibility - all stations and eight wayside plat at key locations.	forms
Annual wheelchair-user trips	. 66,000
Annual paratransit patronage:	
Group van	215,000
Lift van	35,000
Taxi patronage	215,000
Total natronage	465.000



A PCC

streetcar in

Dolores

Park,

June

1972.





PCC

Streetcar

No. 1040 in

Trolley

Festival

service.

PERSONNEL AND FINANCE 1990-91 FISCAL YEAR

Operating Revenue Sources:

Total	\$262.1 million	100.0%
Other revenues	9.0 million	3.4%
Federal funds	7.9 million	3.0%
State and regional funds	44.7 million	17.1%
City general fund	123.7 million	47.2%
Passenger fares	\$76.8 million	29.3%



One

of

Muni's

344

trolley

buses.

TRANSIT POLICY MAKERS FOR SAN FRANCISCO AND THE BAY REGION

Besides San Francisco's Mayor, Board of Supervisors, and PUC, other persons and agencies in the Bay Area play important roles in the development of public transit in San Francisco.

The San Francisco County Transportation Authority, established when San Francisco's voters approved the 1/2 cent sales tax for transportation improvements in November 1989, exercises policy control over the expenditure of the estimated \$902 million that will be generated over the next twenty years by the sales-tax revenues San Francisco's Board of Supervisors are the voting members of the Authority, and it has a staff, under Executive Director Brigid Hynes-Cherin, that is working with other city agencies to oversee the financing, planning, design, and construction of major transportation projects in the city.

The Metropolitan Transportation Commission (MTC) and its staff coördinates regional transportation planning for the nine-county Bay Area, assesses the efficiency and effectiveness of the region's transit agencies, reviews applications from local governments and transit agencies for transportation project funding, and uses its discretionary powers to allocate certain regional, state, and federal operating and capital funds to those governments and agencies.

The MTC is currently made up of representatives from the nine Bay Area counties, the cities of Alameda county, of Contra Costa county, of San Mateo county, and of Santa Clara county; the city of San Francisco; the state of California Business. Transportation, and Housing Agency; the San Francisco Bay Conservation and Development Commission; and the Association of Bay Area Governments. (San Francisco's Mayor and Board of Supervisors each appoint a representative to the commission.)

For further information on the MTC, call its Public Information Office at 415/464-7787, or write to the MTC at 101-8th Street, Oakland, CA 94607. The MTC publishes a **Regional Transit Guide** on how to use the Bay Area's transit services. For further information on the guide, call 415/464-7738.

Muni works closely with the MTC, the **Transit Operator Coördinating Council** (under MTC, and made up of the region's transit-agency managers), and the **Regional Transit Association** (comprising the larger transit agencies in the area) for improved regional coördination of fares and service, marketing of transit tickets and passes, and installation of regional transit information at major transit transfer points throughout the Bay Area.

Powell cars
with a standardroofed car on
the left and a
"Bombay"-roofed
car on the right.





The

Oporto

Streetcar in

Trolley

Festival

Service.

SERVICE

Service Area Characteristics

The City & County of San Francisco49 square miles
Population727,400
Jobs
Weekday, daytime population1.2 million

Route and Equipment Statistics

Vehicle Type	Number of Vehicles	Number of Lines	Round-trip Route Miles	Annual Veh. Revenue Miles (000s)	Annual Veh Revenue Hours (000s)
Diesel bus	500	53	734.3	12809	1375
Trolley bus	344	17	180.9	7356	989
Metro streetcar	128	5	72.6	4093	385
Cable car	37	3	10.1	566	132
Totals	1009	78	997.9	24824	2881

There are 5,300 Muni transit stops — over 95% of the city's addresses are within two blocks of at least one of them.

Maximum Equipment Demand

Weekdays:	AM	AM Peak				
	School	Non-Sch.	Noon	PM Peak	9 PM	0wl
Diesel bus	384	362	241	378	129	19
Trolley bus	238	238	182	265	89	
Streetcar	101	101	63	101	42	
Cable car	16	16	25	26	23	-
Total	739	717	511	770	283	27
Saturdays:	8 AM	Noon	5 PM	9 PM	Owl	
Diesel bus	170	193	192	124	19	
Trolley bus	110	142	145	89	. 8	
Streetcar	39	40	40	25		
Cable car	15	23	23	23		
Total	334	398	400	261	27	
Sundays:	8 AM	Noon	5 PM	9 PM	Owl	
Diesel bus	166	179	178	125	19	
Trolley bus	90	127	127	85	8	
Streetcar	21	33	32	21		
Cable car	15	23	23	23		
Total	292	362	360	254	27	

The Market Street Transit Thoroughfare - scheduled Muni buses on an average weekday on Market between Van Ness Avenue and Steuart: 2,390. Scheduled Metro streetcars in the Market Street subway: 1,790.

Muni's Transit Lines

- 1 1 California (t), seven days, evenings (ib 5.9, ob 5.7 / r 28117.2)
- 2 1AX California "A" Express (d), peak hours, peak direction (ib 5.8, ob 5.8 / r 1279.7)
- 3 1BX California "B" Express (d), peak hours, peak direction (ib 4.4, ob 4.4 / r 1824.7)
- 4 2 Clement (d), seven days (ib 6.1, ob 6.3 / r 6371.2)
- 5 3 Jackson (t), seven days, evenings (ib 3.7, ob 3.2 / r 5943.8)
- 6 4 Sutter (t), weekdays (ib 4.0, ob 4.1 / r 5651.0)
- 7 5 Fulton (t), seven days, evenings, owl (ib 7.2, ob 6.9 / r 18721.6)
- 8 6 Parnassus (t), seven days, evenings (ib 6.3, ob 6.2 / r 9006.2)
- 9 7 Haight (t), seven days (ib 4.1, ob 4.0 / r 6987.6)
- 10 8 Market (t), seven days, evenings (ib 3.5, ob 3.6 / r 5610.0)
- 11 9 San Bruno (d), seven days, evenings (ib 10.0, ob 9.8 / r 16418.3)
- 9X San Bruno Express (d), weekdays (during peak hours, operates only in reversepeak direction, with peak-direction service provided by 9AX-BX) (ib 9.7, ob 9.7 / r 7813.4)
- 13 9AX San Bruno "A" Express (d), peak hours, peak direction (ib 9.7, ob 9.7 / r 3264.3)
- 14 9BX San Bruno "B" Express (d), peak hours, peak direction (ib 8.5, ob 8.5 / r 2417.2)
- 15 12 Folsom (d), weekdays (ib 4.0, ob 4.0 / r 695.7)
- 16 14 Mission (t), seven days, evenings, owl (ib 8.1, ob 8.1 / r 47440.1)
- 17 14L Mission Limited (d), weekdays (mid-day) and Saturday (ib 7.8, ob 7.8 / r 4530.4)
- 18 14X Mission Express (d), peak hours, peak direction (ib 8.7, ob 8.5 / r 1908.0)

Notes:

"cc" - cable cars, "d" - diesel buses, "t" - trolley buses, "sc" - streetcars (light-rail vehicles). "evenings" - service on that line until at least midnight. "owl" - 1 a.m. to 5 a.m. service. "peak hours" - weekday rush hours, approximately 7 to 9 a.m. and 4 to 6 p.m. ("peak direction" - towards downtown in the morning and away from downtown in the afternoon). "ib/ob" - inbound and outbound route mileage (directions are same as shown in the "route descriptions" section of the Muni Map). "r" - average weekday boardings for that line — ridership checks were taken at various times from 1983 to 1990, and will not jibe with information shown in the "ridership" section of this guide because aggregate ridership information is seasonally adjusted.

19

- 19 15 Third Street (d), seven days, evenings, owl (ib 10.8, ob 11.5 / r 24184.6)
- 20 16X Noriega Express (d), peak hours, peak direction (ib 7.3, ob 7.3 / r 1873.2). To be divided into 16AX-BX in January 1991.
- 21 17 Parkmerced (d), seven days, evenings (ib 2.9, ob 2.7 / r 2072.5)
- 22 18 46th Avenue (d), seven days, evenings (ib 7.1, ob 7.9 / r 3764.3)
- 23 19 Polk (d), seven days, evenings (ib 9.0, ob 9.0 / r 11144.9)
- 24 21 Hayes (t), seven days, evenings (ib 4.9, ob 4.8 / r 10839.0)
- 25 22 Fillmore (t), seven days, evenings, owl (ib 6.5, ob 5.7 / r 25682.0)
- 26 23 Monterey (d), seven days, evenings (ib 8.5, ob 7.9 / r 4427.3)
- 27 24 Divisadero (t), seven days, evenings (ib 7.4, ob 7.1 / r 17442.0)
- 28 26 Valencia (d), seven days, evenings (ib 8.5, ob 7.8 / r 4893.5)
- 29 27 Bryant (d), seven days, evenings (ib 4.3, ob 4.3 / r 8248.0)
- 30 28 19th Avenue (d), seven days, evenings (ib 9.5, ob 9.5 / r 14000.4)
- 31 29 Sunset (d), seven days, evenings (ib 19.1, ob 18.2 / r 15668.6)
- 32 30 Stockton (t), seven days, evenings (ib 4.7, ob 4.6 / r 28898.4)

The Hamburg

streetcar

in

Trolley

Festival

service.



- 33 30X Marina Express (d), peak hours, peak direction between the Marina and downtown, reverse direction between the Embarcadero and the Presidio [Presidio Express]. (Marina service ib 4.3, ob 4.3. Presidio service ib 4.6, ob 4.5. / r 1881.2)
- 34 31 Balboa (d), seven days, evenings, owl (ib 7.3, ob 7.7 / r 12653.9)
- 35 31AX Balboa "A" Express (d), peak hours, peak direction (ib 8.6, ob 8.6 / r 1377.2)
- 36 31BX Balboa "B" Express (d), peak hours, peak direction (ib 4.7, ob 4.7 / r 966.2)

- 37 32 Embarcadero (d), seven days (ib 3.8, ob 3.5 / r 1772.6)
- 38 33 Stanyan (t), seven days, evenings (ib 6.4, ob 6.1 / r 4796.0)
- 39 35 Eureka (d), seven days, evenings (4.5 roundtrip / r 1019.9)
- 40 36 Teresita (d), seven days, evenings (ib 7.6, ob 4.2 / r 2325.9)
- 41 37 Corbett (d), seven days, evenings (ib 5.1, ob 5.8 / r 2222.2)
- 42 38 Geary (d), seven days, evenings, owl (Ocean Beach Br. ib 1.4, ob 1.6; 48th Ave Br. ib 1.0, ob 1.1.; Ft. Miley Br. ib 1.0, ob 1.0; 32nd Ave.-Transbay Terminal 5.2, Transbay Terminal-30th Ave. 5.3 / r 35715.8)
- 43 38L Geary Limited (d), weekdays (ib 6.0, ob 6.0 / r 19350.5)
- 44 38AX Geary "A" Express (d), peak hours, peak direction (ib 7.0, ob 7.0 / r 1095.9)
- 45 38BX Geary "B" Express (d), peak hours, peak direction (ib 4.9, ob 4.9 / r 1490.6)
- 46 39 Coit (d), seven days (ib 1.6, ob 1.3 / r 313.2)
- 47 41 Union (t), peak hours, both directions (ib 3.4, ob 3.5 / r 4392.6)
- 48 42 Downtown Loop (d), seven days, evenings (ib 7.8, ob 8.0 / r 18706.6)
- 49 43 Masonic (d), seven days, evenings (ib 9.9, ob 10.1 / r 15225.2)
- 50 44 O'Shaughnessy (d), seven days, evenings (ib 9.7, ob 9.5 / r 16398.5)
- 51 45 Union-Stockton (t), seven days, evenings, owl (ib 4.1, ob 4.3 / r 21195.6
- 52 47 Van Ness (t), seven days, evenings (ib 4.1, ob 4.1 / r 10256.2)
- **53** 48 Quintara-24th Street (d), seven days, evenings (ib 10.9, ob 10.9 / r 12956.8)
- 54 49 Van Ness-Mission (t), seven days, evenings (ib 7.3, ob 7.3 / r 22702.4)
- 55 52 Excelsior (d), seven days, evenings (ib 5.5, ob 5.3 / r 3701.6)
- 56 53 Southern Heights (d), seven days (ib 3.0, ob 3.6 / r 1360.8)
- 57 54 Felton (d), seven days, evenings (ib 8.5, ob 11.9 / r 8046.6)
- 58 56 Rutland (d), seven days (ib 2.7, ob 3.0 / r 242.1)
- 66 Quintara (d), seven days, evenings. Service extended to/from downtown, peak hours, peak direction. (to downtown ib 8.1, ob 8.1 [to 9th Ave. 6.0 roundtrip] / r 1511.4)
- 60 67 Bernal Heights (d), seven days, evenings (ib 4.6, ob 4.6 / r 3428.7)
- 71 Haight-Noriega (d), seven days, evenings. Limited-stop service on Haight Street, peak hours, peak direction (71L Haight-Noriega Limited) (ib 8.5, ob 8.6 / r 10565.3)

- 62 73 Lincoln Way (d), peak hours, peak direction (ib 7.8, ob 7.2 / r 384.4). To be eliminated in January 1991.
- 76 Marin Headlands (d), Sundays and some holidays (ib 16.5, ob 16.6 / average Sunday ridership: 438).
- 64 80X Gateway Express (d), peak hours, peak direction (ib 2.0, ob 1.8 / r 1918.4)
- 65 81X CalTrain Express (d), peak hours, peak direction (ib 2.1, ob 2.2 / r 1291.0)
- 66 82X Levi Plaza Express (d), peak hours, peak direction (ib 4.1, ob 3.9 / r 221.7)
- 67 83 Pacific (d), seven days, evenings (ib 2.4, ob 2.3 / r 4924.2)
- 68 88 BART Shuttle (d), peak hours, peak direction (ib 5.5, ob 5.5 / r 1051.7)
- 69 89 Laguna Honda (d), seven days (ib 0.6, ob 0.5 / r 98.2)
- 70 90 Owl (d), seven-day owl service (ib 9.0, ob 9.1 / r 238.8)



A 40' Flyer

diesel

at

Market

and

Powell.

- Powell-Mason (cc), seven days, evenings (ib 1.5, ob 1.6 / r 10727.9)
- 72 Powell-Hyde (cc), seven days, evenings (ib 2.1, ob 2.1 / r 12088.0)
- 73 California (cc), seven days, evenings (ib 1.4, ob 1.4 / r 7675.6)
- 74 J Church (sc), seven days, evenings, diesel owl (ib 4.5, ob 4.5 / r 16045.9)
- K1ngleside (sc), seven days, evenings, diesel owl (ib 7.8, ob 7.7 / r 23231.8)
- T6 L Taraval (sc), seven days, evenings, diesel owl (ib 7.9, ob 7.9 / r 29736.6)
- 77 M Ocean View (sc), seven days, evenings, + 1 diesel owl-service trip (ib 9.0, ob 9.1 / r 31715.9)
- N Judah (sc), seven days, evenings, diesel owl (ib 7.1, ob 7.1 / r 38621.6)

- 11 lines provide 24-hour service.
- 36 lines provide seven-day service until at least midnight.
- 7 lines provide seven-day service only during the day.
- 4 lines provide weekday-only service.
- 17 lines provide rush-hour-only service.
 - 1 line operates only on weekdays and Saturdays (the 14L).
- 1 line provides seven-day service only between 1 a.m. and 5 a.m. (the 90).
- 1 line provides service only on Sundays and some holidays (the 76).
- 78 lines total.

Of the 17 rush-hour-only lines, 14 are express lines. There is also one all-day week-day express line (the 9x). Besides the 14L, the 71/71L and 38L also provide limited-stop service. (With the elimination of the 73 and the conversion of the 16X into the 16AX-BX in January 1991, there will be 15 rush-hour express lines.)

Routes with over 20,000 weekday boardings:

1) 38 Geary/38L Geary Limited	.55066.3
2) 14 Mission/14L Mission Limited	51970.5
3) N Judah	.38621.6
4) M Ocean View	.31715.9
5) L Taraval	. 29736.6
6) 30 Stockton	.28898.4
7) 1 California	28117.2
8) 22 Fillmore	. 25682.0
9) 15 Third Street	. 24184.6
10) K Ingleside	. 23231.8
11) 49 Van Ness-Mission	. 22702.6
12) 45 Union-Stockton	. 21195.6

The shortest line:	89 Laguna Honda
The longest line:	29 Sunset

Muni's service on the city's hills - the steepest grades:

- On diesel bus lines 23.1% on Alabama between Ripley and Esmeralda Ave. (67 line).
- On trolley bus lines 22.8% on Noe between 26th St. and Army (24 line).
- On streetcar lines 9% on the right-of-way in Dolores Park (J line).
- On cable car lines 21% on Hyde between Bay and Francisco (Powell-Hyde line).

RIDERSHIP

Boardings - Fiscal Year 1989-90

Vehicle Type	Average Weekday	Average Saturday	Average Sunday	Annual Total
Diesel Bus	316,700	169,284	124,033	96,460,165
Trolley Bus	271,716	175,963	138,636	86,287,078
Streetcar (LRV)	137,003	57,183	42,487	40,213,584
Cable Car	30,491	26,601	23,390	10,507,412
Total	755,910	429,031	328,546	233,468,239

Weekday Boardings

Total	166,827	329,504	183,466	76,113	755,910
Cable Car	1,637	15,023	5,007	8,824	30,4 91
Streetcar (LRV)	31,878	52,589	36,985	15,551	137,003
Trolley Bus	53,696	126,300	65,666	26,054	271,716
Diesel Bus	79,616	135,592	75,808	25,684	316,700
	AM Peak	Mid-Day	PM Peak	Other	Tota

Annual boardings per San Francisco resident320

% of all vehicle trips that are taken on public transit:

- the national averageapproximately 2%

Average Daily Entries at Metro Stations - 1988

Weekdays

Embarcadero	10,000
Montgomery	11,000
Powell	14,000
Civic Center	9,000
Van Ness	10,000
Church	5,000
Castro	7,000
Forest Hill	4,000
West Portal	5,000
Total	75,000

Saturdays	.33,000

Sundays **26,000**

Pass Sales

Monthly Pass Sales - June 1990

Fast Passes	105,264
Discount Passes	33,680
Youth Passes	28,269
Total	167 213

1-Day/3-Day Pass Sales January - September 1990

1- Day Passes:

Passports -	50,000
From fare machines -	57,266
Total	107,266

3-day Passports66,000

"AC/BART Plus Muni" Ticket Sales - September 1990

For Sept.	1-15	4,977
For Sept.	16-30	4,994

Fast Passes on BART in San Francisco

Average weekday Fast Pass exits at BART stations - May 1990

Embarcadero	4244
Montgomery	4424
Powell	4401
Civic Center	2894
16th St.	2738
24th St.	4333
Glen Park	3161
Balboa Park	6501
Total	32696

Average Saturday exits, all stations - 11,809

Average Sunday exits, all stations - 5,915

FARES

Adults (age 18-64)	85¢
on cable cars	- or valid pass or transfer
	 or valid pass or valid cable car transfer or non-cable car transfer plus \$1.00
Discount	
 Seniors (age 65+) Disabled persons with a valid Regional Transit Connection Discount Card 	- or valid pass or transfer
on cable cars	15¢
Youth (age 5-17)	- or valid pass or transfer
on cable cars	- or valid pass or transfer
Children (under age 5)	 or valid pass or valid cable car transfer or non cable-car transfer plus 75¢

A 60'

M.A.N.

diesel

in front of

Muni

headquarters.



Exact change is necessary, except on the cable cars. Transfers are issued free upon request at time fare is paid. They are valid for at least 90 minutes for two boardings in any direction.

Service to Candlestick Park for ballgames is available for special fares.

Passes. Muni passes are good on all Muni vehicles, including the cable cars, and are valid for a reduced fare to Candlestick Park. In addition, the adult monthly Fast Pass is good on BART and CalTrain within San Francisco.

Fast Pass (adult monthly pass)	\$28.00
1-day pass	
3-day pass	
Discount Pass	
(senior and disabled monthly pass)	
Youth Pass	\$5.00

1-day passes are sold at the cable car fare machines. In addition, 1-day and 3-day "Passports" are also available. Besides being good for Muni service, the Passports are good for discounts at several San Francisco attractions, including the museums at Golden Gate Park, attractions at Fisherman's Wharf and Fort Mason, and the Exploratorium.

All of Muni's passes are good for a discount on SamTrans service, and there are passes, tickets, and transfers issued in conjunction with other regional transit agencies. AC Transit monthly passes with a Muni sticker, "AC/BART Plus Muni" halfmonthly tickets, CalTrain monthly tickets with a Peninsula Pass sticker, and Vallejo ferry monthly passes are honored the same as Fast Passes, except that they are not good for free BART service within San Francisco. BART-Muni Discount Tickets are available in the paid areas of the San Francisco and Daly City BART stations for a discounted Muni adult fare to and from the BART stations. Alameda/Oakland ferry tickets are good for Muni service to or from the ferry terminal area. The Golden Gate Ferry transfer is treated the same as a Muni adult cash fare.

Fares are subject to change—as you can see from the fare history on the next page.

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Muni Fare Histor	>								
		, d	1-Day/	100				Youth	-
Date	Basic	Car	Pass	Pass	Discount	Pass	Youth	Car	Youth Pass
Dec. 28, 1912	56			-	•	1		•	
Sept. 29, 1944	70	(same as basic)		•		,		•	
May 20, 1946	1001	=			,		•	•	
June 1, 1952	15¢						229	,	
Nov. 1, 1952	=					,	56	,	÷
June 30, 1969	20c	25¢			563	1	=	•	٠
Aug. 31, 1970	25¢	(same as basic)			=	,	=	•	
May 1, 1974	=	=		\$11			=	,	
0ct. 1, 1974	=					\$2.50	=	•	
April 1, 1980	200	·		\$16	=	-	=		
April 1, 1982	909 909	\$1.00⁴	\$32/-	\$24		=	10g		
-	=	=	=	=	-	=			\$5.00
5,	=	=	_	=	-	=	25¢6		
-	=	=	=	\$20	=		=	٠	
Sept. 1, 1985	=		=	\$24		=	-		-
-,	75¢	\$1.50	\$5/-	\$23	15¢	\$4.50	-	75¢	-
Aug. 1, 1987	=		=	\$25	. (=	-	
Aug. 1, 1988	85¢	\$2.00	\$6/\$107	\$28		=		\$1.00	-

Notes:

- 1. Tokens were sold at three for 25¢ from May 20, 1946, through Jan. 5, 1949.
- 2. The youth fare was only payable by tickets available to San Francisco school-children under age eighteen, through Feb. 3, 1973. From Feb. 4, 1973, through March 31, 1982, children age five through fourteen and children age fifteen through seventeen with San Francisco high school identification were eligible for the youth fare. As of April 1, 1982, any child age five through seventeen is eligible for the youth fare.
- 3. The fare for the elderly was originally applicable only during off-peak hours. As of Oct. 1, 1974, it is applicable during all hours.

A 30' Orion diesel at

Forest

Hill

Station.



- 4. A charter amendment was passed in Nov. 1981, allowing cable car fares to be higher than regular fares and overturning a charter provision, in effect since Nov. 1971, which mandated that cable car fares be the same as regular fares.
- 5. A Sunday/Holiday Pass was available beginning July 2, 1950, for 35¢. Its price was increased to 50¢ as of June 1, 1952. The pass was discontinued as of April 1, 1980. The present kind of day-passes were originally only available at the cable car fare machines, and were not actually available to the public until June 9, 1982, when the first cable car fare machines went into service at Powell & Market
- 6. The youth fare was not increased from 10¢ to 25¢ until a sufficient number of Youth Passes were available for purchase. (San Francisco public schools opened on Sept. 8th of that year, and since a standard Youth Pass was not available in large quantities until early October, Muni had some temporary Youth Passes printed that were valid from Sept. 1st through Oct. 31st.)
- 7. The new "Passport" one-day and three-day passes became available to the public on June 14, 1989. (One-day passes continue to be sold at the cable car ticket machines.)

BART and **CalTrain** - As of April 1, 1983, Fast Passes are usable on BART within San Francisco. As of December 1, 1989, Fast Passes are usable on CalTrain within San Francisco.

Express Fares - An express fare of 25¢ was charged on certain lines as of June 30, 1969 (the adult cable car fare was also increased to 5¢ over the regular fare at that time). The express fare was increased to 30¢ as of Aug. 31, 1970, although the cable car fare remained at 25¢. The separate express fare was discontinued as of April 1, 1980.

Handicapped Fares - As of Feb. 14, 1974, handicapped persons with a special identification card were allowed to ride for the senior fare, with the same time-restrictions then in effect for the senior fare. The time restrictions for handicapped persons were removed as of March 19, 1976.

As of April 1, 1980, all handicapped persons (with proper identification) are allowed to use the same monthly discount pass as seniors, and blind persons must pay the same fare as other handicapped persons (prior to April 1980, blind persons rode free of charge.)

Ready Fare Plan - Beginning Sept. 7, 1968, under Muni's Ready Fare Plan, operators, because of a series of robberies and assaults, were no longer required to carry money on Muni vehicles to make change, and regular-fare passengers were required to have either exact change, a token, or a transfer.

Shoppers' Shuttle Fares - Shoppers' Shuttle service was available beginning Sept. 14, 1953, at a 5¢ fare with no transfer privileges. The fare was increased to 10¢ as of June 30, 1969. The special fare was discontinued as of April 1, 1980.

Transfers - On Nov. 3, 1974, transfer rules were liberalized to allow travel in one general direction, with stop-over privileges, for up to two hours and twenty minutes. Before this time, Muni had very strict transfer rules, with passenger transfers allowed only at certain transfer points for travel in one direction.

On June 17, 1981, the rules were changed to allow travel in any direction for at least ninety minutes. As of May 3, 1986, the transfer was changed to a two-part transfer, usable for two transfers in any direction for at least ninety minutes, in an effort to decrease transfer fraud.

277 hp 300 hp 277 hp 277 hp

40/70 57/100 40/70 40/70

48/72

Cap.

DIESEL BUSES

Note: 20 GMCs and 20 AMGs make up the reserve fleet.

excellent when emergency services or temporary reroutes are needed. Average life expectancy of a diesel should be about 12 Diesels are best used where a relatively low frequency of service or other factors do not justify electrification. They are also

Year	Manuf.	Model	Series	NO.	Cost	LBS.	i	W.	ェ	Сар.	Motor
1972	FLYER	E700A	5001	1	\$74,000	23,000	40,	102"	125"	51/75	165 hp
1973	FLYER	E700A	5002	1	\$74,000	23,000	40,	102"	125"	44/75	165 hp
1975-77	FLYER	E10240	5003-5345	342	\$74,000	23,000	40,	102"	125"	50/75	165 hp
Total				344							

less polluting, better hill climbers, more energy efficient, and longer lasting. Average life expectancy should be about 20 years. Although they require overhead wires and their operations are less flexible than that of diesels, trolley buses are quieter and

STREETCARS (LIGHT-RAIL VEHICLES)

Manuf.	Model	Series	No.	No. Cost	LBS.	_i	L. W.	Н. Сар.	Cap.	Motors
BOEING	SLRV-1200	1200-1251	51	\$371,200	67,000	71,	106 1/4"	136″	66/132	2 @ 210 hp ea.
BOEING	SLRV-1200	1253-1299	46	\$371,200	000'29	71,	106 1/4"	136″	66/132	2 @ 210 hp ea.
BOEING	SLRV-1252	1252	-	\$371,200	67,000	71,	106 1/4"	136"	56/132	2 @ 210 hp ea.
BOEING	SLRV-1300	1300-1329	30	\$734,000	67,000	71,	106 1/4"	136″	48/132	2 @ 210 hp ea.
		,	128							

Streetcar (light-rail) service provides a medium-capacity service, between a bus line's lower capacity to carry passengers per hour and the higher capacity (and construction costs) of heavy rail (such as BART). A streetcar's average life expectancy

should be about 20 years. (The lifespan of the Boeing-Vertol cars, however, is about 15 years.)

CABLE CARS

Model	Series	No.	LBS.	Ĺ	W.	Ŧ	Cap.	Power
POWELL	1-28	26	15,500	27.6"	,96	124 3/4"	29/60	9 1/2 mph cable
CALIFORNIA	49-60	1	16,800	30,3"	,96	122"	34/68	9 1/2 mph cable
Total		37				1		

Not only for tourists, the cable cars are used by workers, shoppers, and others as part of Muni's regular transit network there will be cable cars as long as there is a Municipal Railway.

Notes:

- GMC General Motors Corp. (391 vehicles in the original order, with 149 of them rehabilitated and renumbered in the early 1980s). AMG American Motors General (100 vehicles in original order). M.A.N. Maschinenfabrik Augsburg-Nürnberg A. G. Orion built by Bus Industries of America. Boeing Boeing-Vertol, a former subsidiary of the Boeing Co.
- "Year" year accepted by Muni. "Series" the first and last vehicle number of a particular series. "Cap." - seated/total optimum capacity, as determined by Schedules Department load factors.
- Accessibility the Flyer, New Flyer, M.A.N., and Orion diesel buses are fully accessible they are wheelchair accessible and their fronts can be made to lower, or "kneel", for easier boarding.
- The 60' buses and the streetcars are articulated they can bend in the middle for better maneuverability.
- Trolley bus and streetcar motors are powered by 600 volt DC electricity from overhead wires.



The Milan

Streetcar

in

Trolley

Festival

service.

HISTORIC VEHICLES

Historic Streetcars (Trolleys)

U.S. streetcars — built for Muni unless otherwise noted

No.	Year	Manufacturer	Length	Seats	Comments
	1912	W. L. Holman Co.	47'1"	48	 Muni's 1st streetcar, painted in Muni's original red and gray, one of 20 vehicles that were built by this company at a cost of \$7,700 each.
130	1914	Jewett Car Co.	47'1"	50	- saved from the scrapheap by the late Charles Smallwood, a Muni shop foreman, it served as wrecker 0131 for many years and was restored for Trolley Festival service; painted in Muni's blue and yellow colors.
578S	1895	John Hammond & Co		26	- built for the Market Street Railway of 1893-1902. Served as sand car 0601 for many years and restored for the 50th anniversary of the '06 'quake and fire. (Not in operating
1006	1948	St Louis Car Co.	50'5"	60	condition at this time.) - double-ended PCC, Muni's first PCC car. (PCC's are streetcars whose designs were originally developed under the auspisces of the Electric Railway Presi- dents' Conference Committee in the 1930s.) This car and No. 1040 are in Muni's cream and
1040 1704	1952 1946	St. Louis Car Co. St. Louis Car Co.	46'5 1/2" 46'	58 53	green colors. - last PCC car built in the U.S. - a PCC in the colors and numbering of the St. Louis Public Service Co., which operated it until 1957; it was then purchased by Muni and operated as No. 1128.

Streetcars from other countries

No.	Year	City and Country	Length	Seats	Comments
106	1922	Moscow and Orel,			
		USSR	33′8″	24	- a gift from the people of the Soviet Union.
189	1912	Oporto, Portugal	30'6"	22	 one of many streetcars built by Philadelphia's J. G. Brill Co. and shipped in kit form overseas.
228	1934	Blackpool, England	42′_	56	- a "boat" car built for service in
					the English seaside resort of Blackpool, it is a gift from that city.
496	1930	Melbourne, Australia	48′	52	- this car and No. 586 served for
					many years on Melbourne's large tramway (streetcar) system.
578J	1927	Kobe City and			•
		Hiroshima, Japan	44'9"	36	- acquired with the help of the
					Corporate Railway Assembly of Japan.
586	1930	Melbourne, Australia	48′	52	- not in operating condition at this time.
1834	1928	Milan, Italy	45'7"	29	- a gift from the City of Milan.
3557	1951	Hamburg, Germany	46′3″	31	 a gift from the City of Hamburg, this and other historic vehicles were acquired for Muni through the indefatigable
					efforts of the late Maurice Klebolt.

Historic Trolley Buses

No.	Year	Manufacturer	Length	Seats	Comments
506	1941	St. Louis Car Co.	34'8 1/2"	40	- purchased for the R Howard line, Muni's first trolley-bus line, which began service in Sept. 1941.
559	1948	Marmon-Herrington			- from Miami Valley Regional Transit Authority (Dayton, Ohio).
614	1940	Twin Coach			- from Seattle
632	1940	Twin Coach			- from Seattle
641	1943	Twin Coach			- from Seattle
643	1944	Pullman-Standard			- from Seattle
776	1950	Marmon-Herrington	39'3"	48	- one of 380 trolley buses acquired from different manufacturers from 1947 to 1952 for lines that had been converted from streetcar service.



Muni's
A streetcar
line
and
No. 1
bus line,
10th Avenue &
Fulton Street,
December
1917.

Historic Motor Buses

No.	Year	Manufacturer	Length	Seats	Comments
062	1939	White	28′	32	- Gasoline powered. Last saw regular service on the 39 Coit line in 1975.
0161	1947	Fageol-Twin	-	44	- Gasoline powered. This and 0163 were part of a ten-bus purchase for the intended replacement of the Powell St. cable car service. These were
					the first vehicles to have automatic transmissions and Muni's cream and green paint scheme.
0163	1947	Fageol-Twin		44	
0419	1949	White	35′	44	- Gasoline powered. One of a fleet whose first use was the replacement of streetcar service on several lines, most
					of which would later be converted to trolley-bus operations.
2246	1956	Mack	38′	48	- one of a fleet of 450 acquired between 1955 and 1960.
3287	1969	GMC	40*	48	 one of a fleet of 391 acquired in 1969-70 — the first vehicles to have Muni's short-lived red and yellow paint scheme. Some rehabilitated vehicles in this fleet are still in regular service.
4009	1969	Flxible	40′	48	- one of a fleet of 10 vehicles similar in appearance to the GMC buses. These Flxibles should not be confused with the 25 "Darth Vader" Grumman Flxibles that were purchased in 1980.
4154	1975	AMG	35′	40	- one of a fleet of 100 35' AMG buses, twenty of which are in reserve service. This was the first fleet of vehicles to have Muni's present colors.
			37		

Operating Cable Cars

Powell Cars

No.	Builder	Year
1	Muni	1973
2	Carter Bros	1891
3	Carter Bros	1891
	Mahoney Bros	
5	Carter Bros	1891
6	Carter Bros	1891
7	Carter Bros	1891
8	Carter Bros	1891
9	Mahoney Bros	1887
10	Carter Bros	1891
11	Carter Bros	1891
12	Carter Bros	1891
14	Muni	1964
15	Carter Bros	1891
	Muni	
17	Mahoney Bros	1887
	Muni	
19	Muni	1986
20	Carter Bros	1891
22	Mahoney Bros	1887
23	Ferries & Cliff House Rwy	1888-90
24	Mahoney Bros	1887
	Ferries & Cliff House Rwy	
	Ferries & Cliff House Rwy	
27	Mahoney Bros	1887
28	Mahoney Bros	1887

California Cars

No.	Builder	Year
49	John Hammond & Co	1906
50	Cal. St. Cable R.R. Co	1910
51	John Hammond & Co	1906
53	John Hammond & Co	1907
54	John Hammond & Co	1907
55	.John Hammond & Co	1906
56	. Cal. St. Cable R.R. Co	1913
	. Cal. St. Cable R.R. Co	
	. Cal. St. Cable R.R. Co	
59	.John Hammond & Co	1907
60	.John Hammond & Co	1907

- Except for the cars rebuilt by Muni, the dates shown are the dates of original construction the cars have been extensively repaired and rebuilt over the years.
- The cars built by Mahoney Bros. and the Ferries & Cliff House Railway should be noted for their distinctive "Bombay" roofs.
- No. 1 is entirely new, except for the roof from a Carter Bros. car.
 - No. 3 was designated "the cable car lady's cable car" for the 100th anniversary celebration in 1973, in honor of Mrs. Klussmann. It is painted in Muni's cream and green.
 - No. 13, a Carter Bros. car, is not listed because it is out of service for major repairs.
- The No. 514 that came to Muni in 1944 was a Mahoney Bros. car. It was dismantled in October 1963 and replaced by an almost entirely new 514 in February 1964. The new 514 was renumbered to No. 14 in 1973, the system's 100th anniversary year, when all the Powell cars were renumbered.
 - No. 16 was almost entirely rebuilt, with only part of the roof retained from the original Carter Bros. car. It is painted in Muni's blue and yellow colors (three of the Powell cars had been painted in these colors for a brief time after Muni acquired the cars in the 1940s).
- Nos. 18 and 19 (formerly Carter Bros. cars) are almost entirely new, except for some spare parts in the case of No. 18 and some metal work in the case of No. 19.

Muni's Paint Schemes

Muni's first streetcars were painted gray with red roofs. In 1939, Muni began using a blue and yellow scheme on its streetcars, in honor of the 1939-40 Golden Gate International Exposition held on Treasure Island (an orange and black scheme had been used on Muni's buses since 1934). After the acquisition of the MSRy in 1944, Muni vehicles were in a variety of colors, until vehicles first appeared in a cream and green paint scheme in 1947. This scheme was very similar to the MSRy's scheme of green sides and white fronts, which had first appeared in 1926. (The white fronts were patented as a safety measure in 1927.)

Muni's cream and green colors were continued until 1969, when they were officially replaced by a red and yellow scheme, based on the California Street cable car colors, that appeared on the new GMC buses (a new Muni logo was also adopted at that time). As with other color-scheme changes, not all of Muni's vehicles were painted in the new colors. For instance, many of the PCC streetcars continued in the cream and green colors until their retirement in 1982.

The 1969 paint scheme and logo were short lived, and were replaced by Muni's current paint scheme and logo, designed by Landor Associates. The Landor "Sunset Glow", "California Poppy Gold", and white colors first appeared on a Muni fleet in 1975.

Colors essentially the same as the present-day paint scheme for the Powell cars first appeared when Car 1 was introduced to the public in the cable cars' centennial year of 1973. All of the Powell cars had previously been cream and green, essentially the same colors that they had when Muni acquired them from the MSRy. All the Powell cars except No. 3 and No. 16 are now in a maroon, light blue, and white paint scheme, which was designed to be a more authentic reflection of the cars' service in the 19th century. (The California Street cars' maroon and gold scheme was slightly modified during the 1982-84 rehabilitation, when light blue and white were added so that there would be some conformity with the Powell cars' colors.)

Bay Area Historic-Transit Aficionado Associations

- Bay Area Electric Railroad Association, P.O. Box 3694, San Francisco, CA 94119-3694. Its Western Railway Museum is located at Rio Vista Junction on Highway 12, 10 miles east of the I 80 Fairfield exit. The museum is open 11 a.m. to 5 p.m. on weekends and has operating streetcars, including historic Muni vehicles (phone 707/374-2978).
- Market Street Railway Company, P.O. Box 11632, San Francisco, CA 94101-7632. A non-profit group dedicated to San Francisco vintage rail operation, it provides essential resources for the preservation and operation of historic transit vehicles in San Francisco.
- Northern California Railroad Club, 163 Tioga Avenue, San Francisco, CA 94134, a group well-known for its rail-fan excursions.
- Pacific Coast Chapter, Railway & Locomotive Historical Society, 115 I Street, Sacramento, CA 95814-2204 (phone: 916/447-9665). The Pacific Coast Chapter operates the cable car museum under contract with the city.



Historic

Streetcar

NO. 578S.

built

in

1895.

FACILITIES

Muni Metro Streetcar System

- 4' 8 1/2" gauge single track 40.8 miles. (4.6 miles will be added when the 2.3 mile J Church extension is completed early in 1991.)
- Stations Embarcadero, Montgomery, Powell, Civic Center, Van Ness Ave., Church, and Castro stations in the Market St. Subway; Forest Hill and West Portal stations in the Twin Peaks Tunnel. Embarcadero, Montgomery, Powell, and Civic Center are also BART stations. (The Twin Peaks Tunnel's Eureka Station, just west of Castro & Market, was closed when the tunnel was reconstructed for Muni Metro service. West Portal Station was entirely rebuilt, and Forest Hill Station underwent major renovations, which were completed in October 1985.)
- Market St. Subway (Embarcadero to Castro St. stations) 15,680 ft.
- Sunset Tunnel 4,232 ft.
- Twin Peaks Tunnel West Portal to East Portal, 11,920 ft.; West Portal to Castro St. Station, 12,255 ft.



Flynn

Division

at

15th and

Harrison

Streets.

Cable Car System

- 3 1/2' gauge single track 8.7 miles.
- Cables four (California, Powell, Hyde, and Mason), each powered by a 510 hp motor in the cable car barn.
- Cable diameter 1 5/16".
- Total cable length 10.72 miles.

The

William

н

Scott

Facility.



Major Facilities:

Army Street Facility - Army & 3rd Sts. (3000 3rd St.) Leased since 1984. Originally used as the division for the 60' diesels, it is now used as Maintenance Training headquarters and a storage area for diesels not in regular service. 80,000 sq. ft.

Cable Car Barn - Washington & Mason Sts. (1201 Mason St.) Originally built in 1887 for the Ferries & Cliff House Rwy., rebuilt after the 1906 earthquake and fire, and in 1982-84. 83,741 sq. ft. (The cable car museum is located in the barn - phone: 415/474-1887.)

H. Welton Flynn Motor Coach Division - 15th & Harrison Sts. (1940 Harrison St.) A former U.S. Steel warehouse, it was dedicated in July 1989 and opened that October. As of September 1990, houses all 100 of the 60' diesels and 25 of the 40' diesels. 268,872 sq. ft.

Geneva Carhouse - Geneva & San Jose Aves. (2301 San Jose Ave.) Originally opened in 1901 for the San Francisco & San Mateo Electric Railway, new storage and maintenance facilities were dedicated in May 1985. The main storage area for Muni's historic rail vehicles. 72,255 sq. ft.

Curtis E. Green Light Rail Center - Geneva & San Jose Aves. (425 Geneva Ave.), plus Geneva Upper Yard. On the site formerly occupied by Muni's Elkton Shops and Ocean motor-bus division. Dedicated as the Muni Metro Rail Center in June 1979 and re-dedicated for the former Muni General Manager in November 1987. 297,371 sq. ft.

Kirkland Motor Coach Division - North Point & Stockton Sts. (2301 Stockton St.) Opened September 1950 on a site previously occupied by the Kirkland Co. warehouse. 111,200 sq. ft.

Potrero Trolley Coach Division - Mariposa & Hampshire Sts. (2500 Mariposa St.)

Opened in 1914 for Muni streetcars. Converted entirely to trolley-bus service in 1949.

As of September 1990, the division for 183 buses. 256,876 sq. ft.

Presidio Trolley Coach Division and Muni Headquarters - Presidio Ave. & Geary Blvd. (949 Presidio Ave.) Opened for streetcars and as the headquarters in 1912, it was known as the Geary Division for streetcar operations. Converted entirely to trolley-bus service in 1956. As of September 1990, the division for 159 buses. 254,440 sq. ft.

The
1401

Bryant

Street

Facility.

William H. Scott Facility - Harrison St. & Treat Ave. (1849 Harrison St.) Dedicated for the former Muni General Manager in December 1989. Built across the street from Flynn Division for employee parking and non-revenue vehicle repair. 116,144 sq. ft.

John M. Woods Motor Coach Center - 22nd & Indiana Sts. (Transportation: 1001 22nd St.; Maintenance: 1095 Indiana St.) Dedicated for the former Muni General Manager in December 1977. 319,000 sq. ft.

24th & Utah Facility (2548 24th St.) - originally built for United Railroads of S.F. streetcars in 1903-04, the facility now houses all of Ways & Structures except for non-revenue vehicle repair. 86,706 sq. ft.

1401 Bryant St. Facility - Bryant & Alameda Sts. Originally built as a powerhouse in 1893 for the Market St. Railway, it now houses units of the Power, Signals & Electronics department. 48,000 sq. ft.

Transit Shelter Program

Since October 1987, almost 1000 transit shelters have been placed at transit stops throughout the city. The shelters are built and maintained by Gannett Transit Shelter of San Francisco at no cost to the city, in return for the company's right to place commercial advertising in the shelters located in commercial and high-density areas.

CAPITAL PROJECTS

Vehicle Acquisition

- 56 New Flyer 40' diesel buses were acquired 1n 1989, at a cost of \$180,000 each.
- 45 Orion 30' diesel buses have just been acquired, at a cost of \$165,000 each.
- 24 60-foot New Flyer articulated diesel buses will be acquired in the next few months, at a cost of \$285,000 each.
- 35 60-foot trolley buses will be acquired from the New Flyer Co. in 1992-93, at a cost of \$612,000 each.
- 20 PCC streetcars are being acquired and will rehabilitated so that they can replace the 8 Market trolley-bus service in 1993 or 1994.
- 40 to 50 Metro streetcars are to be acquired in 1994-95.

New Service

The 2.3 mile extension of the J Church Muni Metro line from 30th & Church, on 30th St. and San Jose Ave., to Geneva & San Jose Aves., begun in January 1989, is expected to be completed in early 1991, with an extension of service on M-line tracks to San Francisco State University and the Stonestown shopping center to be implemented in mid-1992. Conversion of 31 Balboa diesel service to trolley-bus operations began in August 1990 for completion in early 1992. Public meetings and hearings are underway for the conversion of the 71 Haight-Noriega diesel line to trolley-bus service. If the conversion is approved, trolley buses could be operating on that line in 1995. After PCCs have replaced trolley bus service on Market St., as stated above, there are plans to extend the PCC service on The Embarcadero to Fisherman's Wharf in 1996-97. Other proposals include the extension of Muni Metro and trolley bus service to the Mission Bay project.

Muni Metro Improvements

A new signal system will provide continuous tracking of all streetcars in the Market St. Subway and Twin Peaks Tunnel, controlling their acceleration/deceleration, location, and speed. This new system is planned to be installed by 1994. The Muni Metro Turnback Project will extend the subway east of the Embarcadero station and then allow the Metro cars to surface on The Embarcadero between Howard and Folsom. This project will improve turnback operations, allow for better temporary storage of disabled vehicles, and provide an exit from the subway for the proposed service to the Mission Bay project, with a possible extension of service to the Third Street transit corridor. (Metro service in the Geary corridor is also being studied.) The construction phase of the turnback project will take about three years, and is expected to begin in 1991. Both the new signal system and the turnback project will allow for faster, more reliable, and higher capacity service in the subway.

Fleet Maintenance and Storage Facilities

A major program of construction of new Muni facilities and the rehabilitation of older ones is well under way. The new Flynn Division was opened in October of 1989, and the new Scott facility was dedicated that December. Next in the program is the Potrero Division, which will be remodeled from December 1990 to early 1992, in part to accommodate the new 60' trolley buses.



Double-

ended

California

cable car

at California

& Powell.

Single-

ended

Powell

cable car.

April

1905.



TRANSIT IN SAN FRANCISCO 1852-1989

1852	Omnibuses (vehicles similar to stagecoaches) begin service in San Francisco, between Portsmouth Square and Mission Dolores.
July 1860	Beginning of the first horsecar service in San Francisco, on the San Francisco Market St. Railroad.
Oct. 1863	Train service to Palo Alto begins, extended to San Jose the following January.
Sept. 1873	Hallidie's Clay St. Hill R.R. begins service after testing had commenced that August 2nd — the world's first successful cable car line.
Apr. 1878	The California St. Cable R.R. (CSCRR) starts service.
Mar. 1888	The Ferries & Cliff House Rwy.'s cable service begins on Powell St.
Feb. 1891	The CSCRR's O'Farrell, Jones and Hyde line starts service. (In all, eight cable car companies operated twenty-two lines in the city.)
Apr. 1891	The Board of Supervisors bans overhead streetcar wires in the downtown area. Although this order was repealed the next year, the ban continued to be enforced on some downtown streets, including Market St., until after the 'quake and fire of April 1906.
Apr. 1892	First electric streetcar service in S.F., from Steuart & Market Sts. to Holy Cross Cemetery in San Mateo County. (The line did not operate on Market, but ran south on Steuart.)
Oct. 1893	Consolidation of several of the city's railway companies into the Market St. Railway.
Jan. 1900	New city charter calls for public ownership of utilities.
Mar. 1902	Further consolidation of transit companies, including the Market St. Railway, into the United Railroads of San Francisco (URR).
Apr. 1906	Earthquake and fire devastate the city and its transportation system. Afterwards, many of the cable lines, including those on Market St., were converted to streetcar service.
May - Sept. 1907	Strike by URR workers, probably the most violent transit-workers' strike in U.S. history.
Dec. 1909	\$2 million in bond issues are approved by the voters for a municipal streetcar service on Geary St. (This was the fourth attempt at raising funds for a Geary line by means of bond issues.)
May 1912	Last service on the Geary St., Park & Ocean R.R. cable line, forced to end operations under the terms of its operating agreement with the city.
Dec. 1912	First day of Muni service on December 28th, celebrated by a crowd of 50,000 at Geary & Kearny. The first streetcar was operated by Mayor "Sunny Jim" Rolph, a strong advocate of public transit.

Aug. 1913

Voters approve \$3.5 million in bond issues for Muni expansion, partly to provide service to the 1915 Panama-Pacific International Exposition in what is now the Marina.

Dec. 1913

As the company's franchise expires, the city purchases the track and equipment of the Presidio & Ferries Rwy. and takes over operations of its Union St. streetcar service, leaving the URR and the CSCRR as the city's remaining privately owned transit services.



Dec. 1914 Opening of the 911 ft. Stockton St. Tunnel for Muni streetcars and other traffic. (Streetcars operated through the tunnel until January 1951.)

Aug. 1917 First service on Muni's J streetcar line.

First motor-bus transit service in San Francisco, operated by Muni. A line was established from 10th Ave. & Fulton, through Golden Gate Park to 9th Ave. & Judah, and to the western Sunset District.

Feb. 1918 Muni's K line provides the first service through the Twin Peaks Tunnel.

June 1918

Beginning of four-track streetcar service on Market from the Ferry
Building to Castro St. With Muni on the outside tracks and the
privately owned service on the inside, the "Roar of the Four" could be
heard until the 1940s, when the outside tracks were removed under
full Muni ownership of Market St. service.

July 1918

Eight passengers are killed and over seventy injured when a URR streetcar speeds down the hill and jumps the tracks at what is now Geneva Ave. & Schwerin. The car was operated by a motorman, but without a conductor, and a few days later a city ordinance was passed outlawing one-man streetcar operation. Fears for public safety and labor opposition to the loss of jobs prevented this rule from being overturned until the June 1954 general election — the expense

of two-person streetcar and cable car operation was a major incentive for conversion to one-person motor- or trolley-bus service.

- Apr. 1919 Start of Muni's L streetcar service from West Portal to 33rd Ave. The service was extended to downtown and the ocean in 1923. (The K and L lines were instrumental in opening the West-of-Twin-Peaks and Parkside districts for development.)
- Apr. 1921 The URR is re-organized into the Market St. Railway (MSRy). Both companies remained much larger than Muni throughout their existence.
- Oct. 1925 Muni's M streetcar line begins service from Broad St. & Plymouth Ave. to St. Francis Circle.
- Oct. 1928 Muni's N streetcar line begins operations, with its service through the Sunset Tunnel allowing for good transit service between downtown and the Sunset District for the first time.
- Nov. 1930 A city charter amendment permits the MSRy and CSCRR to surrender their route franchises in return for 25-year operating permits. (Action had been nececessary because many of the franchises had expired the previous year.)
- May 1932 First service on the MSRy's 31 Balboa streetcar line, the last streetcar line built in the city.



- Oct. 1935

 The MSRy begins the first trolley-bus service in the city, with the 33 line replacing streetcar service over Twin Peaks on 18th, Market, Clayton and Ashbury Sts.
- May 1938 The MSRy is allowed to raise its fare to 7¢, the first fare increase in the city since it was set at 5¢ in 1878.

- Jan. 1939 Streetcar service begins to the Bay Bridge Transit Terminal (now called the Transbay Transit Terminal) at 1st & Mission Sts. for connections with Bay Bridge electric train service, which operated until April 1958.
- Sept. 1944

 The city acquires the MSRy for \$7.5 million and begins combined operations. Voters had approved the MSRy purchase that May, after five previous attempts to win voter approval had failed. The MSRy brought 2,906 employees to the combined organization, compared to Muni's 1,531. Although the MSRy also had more vehicles and facilities, many were in poor condition. (Included in the purchase were the Powell St. cable lines the Powell-Mason and Washington-Jackson.)
- Nov. 1947

 Bond issues are passed for the conversion of most of the streetcar lines to bus service (a process already begun, but delayed by the war effort), with many of the conversions being to trolley-bus service. In the same election, a proposition was approved preventing the substitution of bus service for the city-owned cable car lines. The fight to save the cable cars was spearheaded by a citizens' group led by a fiercely determined woman named Friedel Klussmann.
- Jan. 1952 The city purchases the CSCRR lines and begins operations.
- June 1954 A proposition is passed approving the present system of cable car service. (Cutbacks had already occurred in the former CSCRR system earlier that year, and Washington-Jackson service was ended in 1956.)
- Dec. 1956 Last service on the B streetcar line on Geary St.
- Apr. 1957 First service on the Powell-Hyde line, made of parts of the old Washington-Jackson and O'Farrell, Jones and Hyde lines.
- **Dec. 1957** Full service on the present-day cable car system begins, with only the Powell-Mason line operating on its full original route.
- Nov. 1962

 Alameda Co., Contra Costa Co., and S.F. voters approve a \$792 million bond issue for BART construction and improvements to Muni's streetcar system.
- Jan. 1964 The cable car system is named the U.S.'s first moving National Historic Landmark.
- July 1967 Beginning of Market St. subway construction for BART and Muni Metro.
- Sept. 1968 After a series of robberies and assaults, operators are no longer required to carry cash on Muni vehicles to make change.

Nov. 1973	BART begins service between Montgomery St. and Daly City, with transbay service starting the following September. (Embarcadero Station opened in May 1976.)
May 1974	Muni's Fast Pass (adult monthly pass) is in use for the first time.
April 1979	New Boeing-Vertol streetcars begin a free shuttle service on the K line between the Balboa Park BART Station and West Portal, which

operates until the next February. Aug. 1979 Phase 1A of Muni's plan for major route changes is implemented, with most of the changes being to routes between downtown and the Richmond District.

Weekday Muni Metro service begins on the N line. Feb. 1980 Sept. 1980 Phase 1B of the route changes, including major changes on the 19 and 42 lines and the introduction of the 43 and 44 as major crosstown lines.

Dec. 1980 The K, L, and M lines begin full weekday Metro service. (From June of that year, weekday service on the three lines had been provided by PCCs west of Twin Peaks, with the K line providing Metro service between St. Francis Circle and the Embarcadero Station.)

June 1981 The J line begins weekday Metro service. In the same month, Muni also began allowing transfers in any direction on any line for the time shown on the transfer Jan. 1982 Phase 2 of the route changes, including the combining of the 1 and 55

> lines into the new No. 1 trolley-bus line (the 55 had been converted from diesel to electric service the month before), the conversion of

the 45 line from diesels to trolley buses, major changes in 24- and 28line service, and the implementation of the new crosstown 29. Sept. 1982 Sept. 21st is the last day of cable car service until June 1984, as the system is shut down for rehabilitation.

With the start of weekend service, full seven-day Muni Metro service Nov. 1982 begins.

Apr. 1983 Muni's Fast Pass is usable on BART within the city for the first time.

June 1983 The first Trolley Festival begins, with historic streetcars from several countries providing service on Market St. every summer through 1987.

Aug. 1983 Phase 3 of the route changes goes into effect, including the electrification of the 24 line and the implementation of the new 9-line service.

May 1984 Sixty-foot articulated (bend-in-the-middle) diesel buses begin service.

June 1984 Return of the cable cars to full service is celebrated with city-wide festivities on June 21st.

•	two lanes of transit service in each direction on Market St.
May 1986	The weekday 30X Freeway Express is split into the rush-hour 30X Marina Express and the weekday 9X San Bruno Express. As previously implemented on the Richmond Expresses, 9X rush hour service in the rush hour direction was divided into AX and BX zones, providing more capacity and faster service for riders.
Oct. 1987	The first shelter in a new transit shelter installation and maintenance program is completed.
Feb. 1988	Mid-day service reductions are implemented on twelve lines, but Muni is also able to extend the No. 33 trolley-bus line for improved crosstown service.
Oct. 1988	Twenty-three lines are affected as major service reductions take place.
Jan. 1989	Construction begins on the J-line extension.
Oct. 1989	Most of Muni's service is interrupted for no more than a few hours by the October 17th earthquake, and Muni's employees are highly praised for their long hours of work to get people to their homes and restore regular service as quickly as possible.

Installation of a second set of overhead trolley-bus wires allows for

FOR FURTHER INFORMATION

capital improvements.

Nov. 1989

Aug. 1985

In addition to the Short-Range Transit Plan and Capital Improvement Program mentioned in the Foreword, further information is also available from the Community Affairs Department. The department's staff will be glad to help persons in need of the latest information on a particular subject. The department also publishes information on Muni's history in addition to that found in this booklet. Persons wishing additional information should write or call: Community Affairs Department, San Francisco Municipal Railway, 949 Presidio Avenue, Room 238, San Francisco, CA 94115 (phone: 415/923-6162; fax 415/923-6166).

San Francisco's voters approve a 1/2¢ sales tax that will bring in an estimated \$900 million over the next 20 years for transportation

Muni's library is also available for those wishing to do more research. It is located in the Service Planning Department's offices at 949 Presidio Avenue, Room 204 (phone: 415/923-6100).





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